



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



January 7, 2015

Mr. Joseph Mooring
Pacific Ethanol Stockton, LLC
3028 Navy Drive
Stockton, CA 95206

Re: Notice of Minor Title V Permit Modification
District Facility # N-7365
Project # N-1143826

Dear Mr. Mooring:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authority to Construct permits N-7365-7-3 and '-8-4 into the Title V operating permit. The proposed project is to install a chiller system to cool down the discharge from the fermentation and beerwell tanks (N-7365-7 and '-8) prior to its release into the CO2 scrubber. This system is expected to improve overall performance and reliability of the CO2 scrubber for VOC control.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authority to Construct permits N-7365-7-3 and '-8-4, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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Central Region (Main Office)
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Title V APPLICATION REVIEW Minor Modification

Facility Number: N-7365
Facility Name: Pacific Ethanol Stockton LLC
Mailing Address: 3028 Navy Drive
Stockton, CA 95206

Contact Name: Joseph Mooring
Phone: (209) 235-0370 ext. 6009

Responsible Official: Michael Kandris
Title: Chief Operating Officer

Processing Staff: Jag Kahlon
Project Number: N-1143826
Date: January 5, 2015

I. PROPOSAL

Pacific Ethanol Stockton LLC (PES) has proposed to incorporate Authority to Construct (ATC) permits N-7365-7-3 and '-8-4 into their Title V operating permit. These permits were issued without Certificate of Conformity (COC). These ATCs authorized PES to install a chiller system consisting of an 80-ton air cooled rotary liquid chiller, a 1,200-gallon stainless steel water holding tank, a chilled water injection system with two spray nozzles, a pump to circulate chilled water from the holding tank to the chiller and the chilled water injection system, and associated piping components (e.g., valves, flanges, connectors, etc.). The chiller system will be used to cool down the discharge from the fermentation and beerwell tanks (N-7365-7 and '-8) prior to its release into the CO₂ scrubber. This system is expected to improve overall performance and reliability of the CO₂ scrubber for VOC control. PES is not proposing any changes to the existing VOC emission rates or CO₂ scrubber control efficiency due to this project.

The purpose of this document is to identify all applicable requirements, determine if the facility will comply with the applicable requirements, and to provide the legal and factual basis for permit requirements.

II. FACILITY LOCATION

This facility is located at 3028 Navy Drive, Stockton, California.

III. EQUIPMENT DESCRIPTION

N-7365-7-4

FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-8) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-8). THE EXHAUST FROM THE PROCESS TANKS IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

N-7365-8-5

ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-7) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-7). THE EXHAUST FROM THE PROCESS TANK IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

IV. SCOPE OF EPA AND PUBLIC REVIEW

This project is a Minor Modification under Rule 2520 since the ATC project under which permits N-7365-7-3 and '-8-4 were issued was not an SB-288 or Federal Major Modification under Rule 2201. Therefore, public review is not required for this project.

V. APPLICABLE REQUIREMENTS

Rule 2520 Federally Mandated Operating Permits (6/21/01)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

The following section details the changes made to PTOs N-7365-7-2 and '-8-3 during project N-1143191 that resulted in ATCs N-7365-7-3 and '-8-4.

N-7365-7-3

Equipment Description of PTO N-7365-7-2

FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, ALL SERVED BY A KOCH GLICH CO2 WET SCRUBBER (SCRUBBER SHARED WITH PERMIT N-7365-8) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

PES has proposed to install a chiller system. Therefore, this equipment description is updated. The updated equipment description is as follows:

FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-8) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-8). THE EXHAUST FROM THE PROCESS TANKS IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

New Conditions – Condition# 15 through 19 in ATC N-7365-7-3

The proposed chiller system has additional valves, flanges, connectors, etc. The applicant stated that the VOC content in the fluid handled through these components will be 2-3% by weight. Since these components will handle fluids containing 10% (or less) VOC by weight, the potential emissions are equated zero per guidance in District Policy SSP-2015 (9/15/05). PES is required to verify VOC content in the fluid from CO₂ scrubber sump and the chilled water holding tank within 60 days of startup under this permit, and whenever required by the District, or the oversight agencies. The following conditions were included:

- VOC content in the fluid handled through the chiller system (shared with permit N-7365-8) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO₂ scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)]

- The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)]
- The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455]
- The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455]
- VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alternative test methods approved by the District prior to their use. [District Rules 2201 and 4455]

Note that all these new conditions are now federally enforceable through Title V permit.

Miscellaneous Changes – Condition #29 in PTO N-7365-7-2

- The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO₂ scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 61]

As a part of this project, Rule reference is corrected from “40 CFR Part 61” to “40 CFR Part 64”, and the condition is made federally enforceable through Title V permit. Note that these changes are necessary to make this condition consistent with language in condition #28 in the PTO N-7365-8-3.

- The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO₂ scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64]

N-7365-8-5

Equipment Description of PTO N-7365-8-3

ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK SERVED BY KOTCH GLICH CO2 WET SCRUBBER (SCRUBBER SHARED WITH PERMIT N-7365-7) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-9, -10 AND '-11)

PES has proposed to install a chiller system. Therefore, this equipment description is updated. The updated equipment description is as follows:

ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-7) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-7). THE EXHAUST FROM THE PROCESS TANK IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

New Conditions - Condition# 14 through 18 in ATC N-7365-8-4

The proposed chiller system has additional valves, flanges, connectors, etc. The applicant stated that the VOC content in the fluid handled through these components will be 2-3% by weight. Since these components will handle fluids containing 10% (or less) VOC by weight, the potential emissions are equated zero per guidance in District Policy SSP-2015 (9/15/05). PES is required to verify VOC content in the fluid from CO₂ scrubber sump and the chilled water holding tank within 60 days of startup under this permit, and whenever required by the District, or the oversight agencies. The following conditions were included:

- VOC content in the fluid handled through the chiller system (shared with permit N-7365-7) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO₂ scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)]

- The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)]
- The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455]
- The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455]
- VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alternative test methods approved by the District prior to their use. [District Rules 2201 and 4455]

Note that all these new conditions are now federally enforceable through Title V permit.

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, the proposed project:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;

- a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act;
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
 6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs (Appendix IV) ;
2. The source's suggested draft permit (Appendix I); and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used (Appendix III).

Compliance is expected with this Rule.

APPENDICES

Appendix I:	Proposed Title V Operating Permit No. N-7365-7-4 and '-8-5
Appendix II:	Authority to Construct Permits N-7365-7-3 and '-8-4
Appendix III:	Permit Application
Appendix IV:	Emissions Change
Appendix V:	Previous Permits to Operate N-7365-7-2 and '-8-3

Appendix I
Proposed Title V Operating Permit No. N-7365-7-4 and '-8-5

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7365-7-4

EXPIRATION DATE: 09/30/2017

EQUIPMENT DESCRIPTION:

FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-8) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-8). THE EXHAUST FROM THE PROCESS TANKS IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapors from the fermentation tanks shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Controlled VOC emissions rate from each fermentation tank served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from the entire fermentation process served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NO_x/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM₁₀/MMBtu; or 0.00285 lb-SO_x/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fugitive VOC emissions from equipment leaks associated with the fermentation process shall not exceed 3.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
14. VOC content in the fluid handled through the chiller system (shared with permit N-7365-8) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO₂ scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)] Federally Enforceable Through Title V Permit
15. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)] Federally Enforceable Through Title V Permit
16. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455] Federally Enforceable Through Title V Permit
17. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455] Federally Enforceable Through Title V Permit
18. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alternative test methods approved by the District prior to their use. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
19. Tanks shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
21. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
22. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO₂ scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = $\{[(\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}) - \text{RTO Outlet}] / [\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}]\} \times 100\%$. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
28. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
30. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
31. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
32. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
33. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
35. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
36. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
37. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
38. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
39. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
40. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

41. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
42. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
43. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
44. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
45. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
46. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7365-8-5

EXPIRATION DATE: 09/30/2017

EQUIPMENT DESCRIPTION:

ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-7) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-7). THE EXHAUST FROM THE PROCESS TANK IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapors from the beerwell process tank shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Controlled VOC emissions rate from the beerwell process tank served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC emissions from equipment leaks associated with the beerwell process tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
13. VOC content in the fluid handled through the chiller system (shared with permit N-7365-7) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO2 scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)] Federally Enforceable Through Title V Permit
14. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)] Federally Enforceable Through Title V Permit
15. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455] Federally Enforceable Through Title V Permit
16. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455] Federally Enforceable Through Title V Permit
17. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alternative test methods approved by the District prior to their use. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
18. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
19. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
21. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = $\{[(\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}) - \text{RTO Outlet}] / [\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}]\} \times 100\%$. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

27. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
30. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
31. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
32. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
33. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
35. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
36. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
37. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
38. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64]
39. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
40. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
41. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
43. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
44. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
45. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix II
Authority to Construct Permits N-7365-7-3 and '-8-4



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING™
COPY

AUTHORITY TO CONSTRUCT

PERMIT NO: N-7365-7-3

ISSUANCE DATE: 10/14/2014

LEGAL OWNER OR OPERATOR: PACIFIC ETHANOL STOCKTON LLC
MAILING ADDRESS: 400 CAPITOL MALL, STE 2060
SACRAMENTO, CA 95814

LOCATION: 3028 NAVY DRIVE
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION:

MODIFICATION OF FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, ALL SERVED BY A KOCH GLICH CO2 WET SCRUBBER (SCRUBBER SHARED WITH PERMIT N-7365-8) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11); INSTALL A CHILLER SYSTEM CONSISTING OF AN 80-TON CHILLER, 1,200 GALLON CHILLED WATER HOLDING TANK, CHILLED WATER INJECTION SYSTEM WITH TWO NOZZLES, A PUMP AND ASSOCIATED PIPING SYSTEM. THE POST PROJECT EQUIPMENT DESCRIPTION WILL BE: FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-8) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-8). THE EXHAUST FROM THE PROCESS TANKS IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO


Arnaud Marjollet, Director of Permit Services
N-7365-7-3, Oct 14 2014 7:59AM - KAHLOJ - Joint Inspection NOT Required

4. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All vapors from the fermentation tanks shall be vented through the CO₂ scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The overall control efficiency for the CO₂ scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from each fermentation tank served by the CO₂ scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the entire fermentation process served by the CO₂ scrubber vented to the RTO shall not exceed 0.0626 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO₂ scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NO_x/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM₁₀/MMBtu; or 0.00285 lb-SO_x/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from equipment leaks associated with the fermentation process shall not exceed 3.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
15. VOC content in the fluid handled through the chiller system (shared with permit N-7365-8) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO₂ scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)]
16. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)]
17. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455]
18. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455]
19. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alternative test methods approved by the District prior to their use. [District Rules 2201 and 4455]

CONDITIONS CONTINUE ON NEXT PAGE

20. Tanks shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
21. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
22. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
23. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO₂ scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = $\{[(\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}) - \text{RTO Outlet}] / [\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}]\} \times 100\%$. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
28. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
29. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
31. The CO₂ scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
32. The water flow rate through the CO₂ scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the water flow rate through the CO₂ scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. If the water flow rate through the CO₂ scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO₂ scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
35. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO₂ scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 61]

CONDITIONS CONTINUE ON NEXT PAGE

36. The RTO shall be operated at a temperature of no less than 1,400 °F. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
37. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
38. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
39. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
40. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 °F limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
41. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
42. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
43. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
44. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
45. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
46. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
47. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
48. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING™

COPY

AUTHORITY TO CONSTRUCT

PERMIT NO: N-7365-8-4

ISSUANCE DATE: 10/14/2014

LEGAL OWNER OR OPERATOR: PACIFIC ETHANOL STOCKTON LLC
MAILING ADDRESS: 400 CAPITOL MALL, STE 2060
SACRAMENTO, CA 95814

LOCATION: 3028 NAVY DRIVE
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION:

MODIFICATION OF ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK SERVED BY KOTCH GLICH CO2 WET SCRUBBER (SCRUBBER SHARED WITH PERMIT N-7365-7) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-9, '-10 AND '-11): INSTALL A CHILLER SYSTEM CONSISTING OF AN 80-TON CHILLER, 1,200 GALLON CHILLED WATER HOLDING TANK, CHILLED WATER INJECTION SYSTEM WITH TWO NOZZLES, A PUMP AND ASSOCIATED PIPING SYSTEM. THE POST PROJECT EQUIPMENT DESCRIPTION WILL BE: ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-7) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-7). THE EXHAUST FROM THE PROCESS TANK IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, '-10 AND '-11)

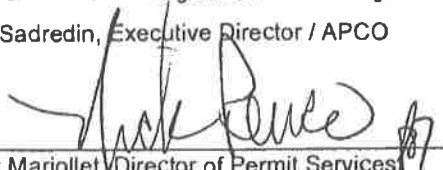
CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO


Arnaud Marjollet, Director of Permit Services

N-7365-8-4 : Oct 14 2014 7:58AM -- KAH/LONJ : Joint Inspection NOT Required

5. All vapors from the beerwell process tank shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from the beerwell process tank served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fugitive VOC emissions from equipment leaks associated with the beerwell process tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
14. VOC content in the fluid handled through the chiller system (shared with permit N-7365-7) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO2 scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)]
15. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)]
16. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455]
17. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455]
18. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alternative test methods approved by the District prior to their use. [District Rules 2201 and 4455]
19. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
22. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO₂ scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = $\{[(\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}) - \text{RTO Outlet}] / [\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}]\} \times 100\%$. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
28. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
30. The CO₂ scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
31. The water flow rate through the CO₂ scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
32. The permittee shall monitor and record the water flow rate through the CO₂ scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
33. If the water flow rate through the CO₂ scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO₂ scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO₂ scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
35. The RTO shall be operated at a temperature of no less than 1,400 °F. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
36. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
37. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

38. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
39. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 °F limit. [District Rule 2201 and 40 CFR Part 64]
40. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
41. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
42. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
43. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
44. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
45. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
46. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

Appendix III Permit Application



San Joaquin Valley Air Pollution Control District


www.valleyair.org

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Permit Application For:

[] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Pacific Ethanol Stockton LLC	
2. MAILING ADDRESS: STREET/P.O. BOX: 3028 Navy Drive CITY: Stockton STATE: CA 9-DIGIT ZIP CODE: 95206	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: 3028 Navy Drive CITY: Stockton SECTION: _____ TOWNSHIP: _____ RANGE: _____	INSTALLATION DATE: _____
4. GENERAL NATURE OF BUSINESS: Process corn to ethanol.	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Permit No.: N-7365-7-3 and N-7365-8-4 Modify the CO₂ Scrubber with a chiller, chiller water tank, and spray nozzle water injection to the incoming vapor line of the CO₂ Scrubber. This will allow the CO₂ Scrubber to operate consistently regardless of the ambient temperatures.	
6. TYPE OR PRINT NAME OF APPLICANT: Carol Romero	TITLE OF APPLICANT: EHS Manager
7. SIGNATURE OF APPLICANT: 	DATE: October 22, 2014 PHONE: 209-235-6014 FAX: 209-235-0376 EMAIL: cromero@pacificethanol.com

For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ 19.00 CHECK#: 909822
	DATE PAID: 12-19-14
	PROJECT NO: N-1143826 FACILITY ID: N-7365



San Joaquin Valley
Unified Air Pollution Control District



TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

☐ SIGNIFICANT PERMIT MODIFICATION
☒ MINOR PERMIT MODIFICATION

☐ ADMINISTRATIVE
AMENDMENT

COMPANY NAME: Pacific Ethanol Stockton LLC	FACILITY ID: N - 7365
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: NA	
3. Agent to the Owner: NA	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Michael Kandris

Signature of Responsible Official

October 22, 2014

Date

Michael Kandris

Name of Responsible Official (please print)

Chief Operating Officer

Title of Responsible Official (please print)

Appendix IV Emissions Change

Emissions Change

Per application review under project N-1143191, quarterly emissions change for each permit unit is 0 pounds of VOC emissions.

Appendix V
Previous Permits to Operate N-7365-7-2 and '-8-3

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7365-7-2

EXPIRATION DATE: 09/30/2017

EQUIPMENT DESCRIPTION:

FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, ALL SERVED BY A KOCH GLICH CO2 WET SCRUBBER (SCRUBBER SHARED WITH PERMIT N-7365-8) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapors from the fermentation tanks shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Controlled VOC emissions rate from each fermentation tank served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from the entire fermentation process served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fugitive VOC emissions from equipment leaks associated with the fermentation process shall not exceed 3.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

13. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tanks shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
17. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
18. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = $\{[(\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}) - \text{RTO Outlet}] / [\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}]\} \times 100\%$. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
23. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
25. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
26. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
27. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

28. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
29. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 61]
30. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
31. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
32. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
33. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
34. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
35. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
36. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
37. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
38. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
39. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
40. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
41. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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42. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
43. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7365-8-3

EXPIRATION DATE: 09/30/2017

EQUIPMENT DESCRIPTION:

ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK SERVED BY KOTCH GLICH CO2 WET SCRUBBER (SCRUBBER SHARED WITH PERMIT N-7365-7) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-9, -10 AND '-11)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapors from the beerwell process tank shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Controlled VOC emissions rate from the beerwell process tank served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.0626 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC emissions from equipment leaks associated with the beerwell process tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
16. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = $\{[(\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}) - \text{RTO Outlet}] / [\text{CO}_2 \text{ Scrubber Inlet} + \text{Vent Gas Scrubber Inlet}]\} \times 100\%$. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
22. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
25. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
27. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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28. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64]
34. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
35. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
36. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
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